

S 155

B82

Copy 1

**COURSE IN MODERN
PRODUCTION METHODS**

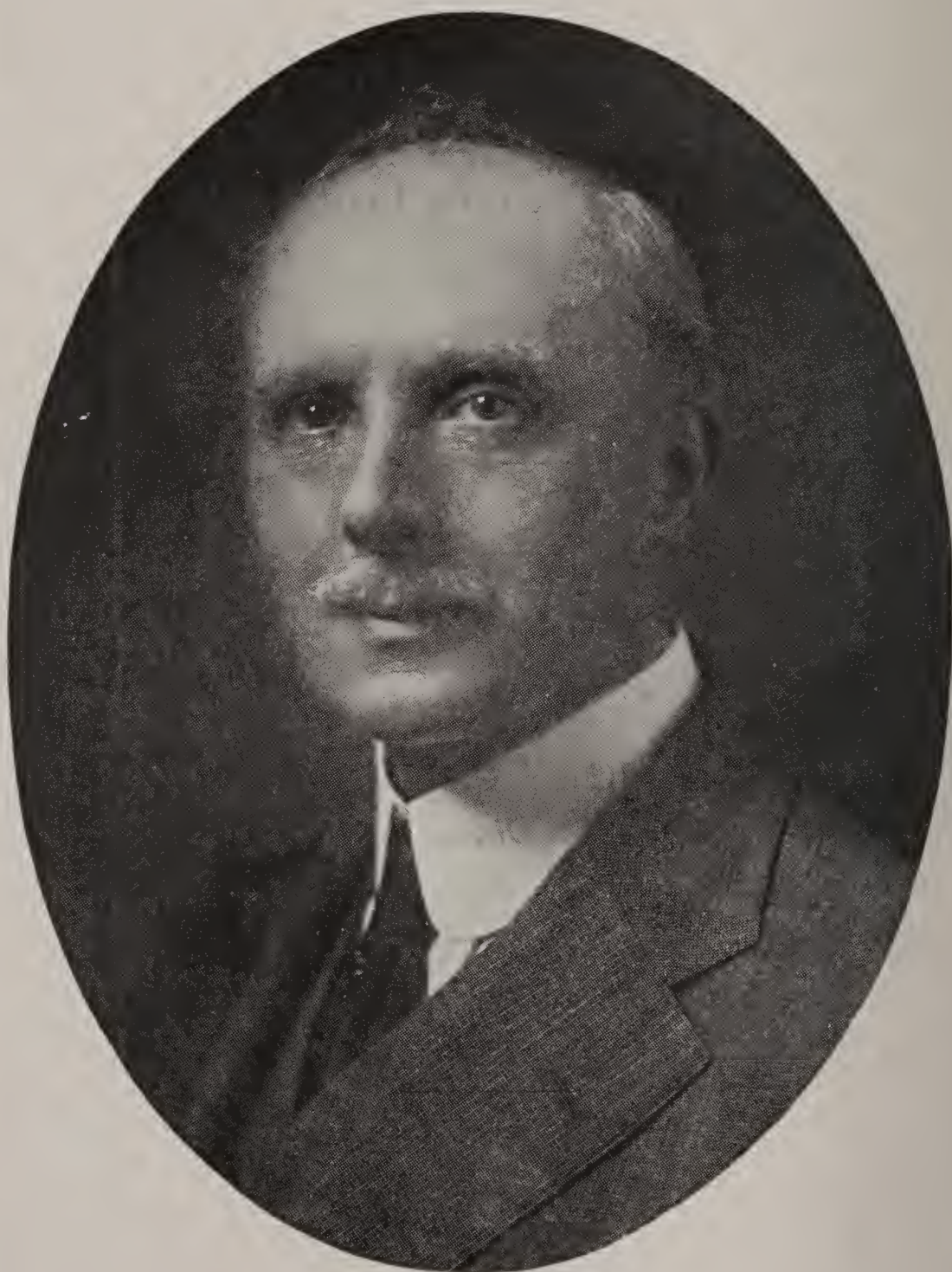
INTRODUCTION

INTRODUCTION

What the Course in Modern Production Methods Is, and How to Get the Most Out of It

By
JOHN CALDER
Director

BUSINESS TRAINING CORPORATION
NEW YORK CITY



JOHN CALDER, M. E.
Director of the Course in Modern Production Methods

©Cl.A559525
JAN 26 1920

TS 155

B82

John Calder, M. E.

John Calder, M.E., Director of the Course in Modern Production Methods, is one of the leading engineers and industrial managers of the United States.

He was born in Scotland and is an honor graduate of the Royal Technical College of Glasgow. Before coming to the United States he had fifteen years' experience in Glasgow as apprentice, foreman, inspector, chief draftsman, and assistant manager in industrial plants. Among his various activities in this country, he has served as general manager of works for the Remington Typewriter Company, as general manager of works for the Cadillac Motor Car Company, as general manager of works for the Remington Arms Company, consulting engineer to the French Government in perfecting the organization of a large munitions factory in Paris during the war, and as vice-president and general manager of the Aeromarine Plane and Motor Company, which supplied airplanes for the U. S. Navy during the war. Mr. Calder is now manager of the Employees' Relations Department of Swift & Company, who have about 70,000 people on their payroll. He is a member of the Institution of Shipbuilders and Engineers of Scotland, the American Society of Mechanical Engineers, and the Engineers Club of New York.

The Course in Modern Production Methods, conducted by the Business Training Corporation, has been organized and is conducted under the supervision of Mr. Calder.

20-12945

CONTENTS

I.	THE PRODUCTION MAN IN THE NEW ERA	6
	Just an Average Fellow—Working at What You Know—A Man Who Broadened Out—The Era of the Production Man—The Modern Need for Trained Men—Trained Foremen and Untrained Workers—Sink-or-Swim Training Inadequate—The Kind of Training Needed—An Intensive Course in Production Methods.	
II.	THE COURSE IN MODERN PRODUCTION METHODS.....	16
	A Proved System of Training—The Study-Unit Plan—Home-Study Plus Conference Work—Teamwork—Handling Men—Organization—Machinery and Materials—Production Records—Management—An Authoritative Course.	
III.	FOLLOWING THE COURSE.....	24
	One Unit at a Time—How to Study Each Unit—Depend on Your Own Efforts—The System of Grading—Ask Questions—Your Schedule.	

Course in Modern Production Methods

JOHN CALDER, *Director*

With the Assistance and Cooperation of

FRED. H. COLVIN

ARTHUR C. JEWETT

JOHN A. HARTNEDY

J. WILLIAM SCHULZE

J. H. VAN DEVENTER

The text of the Course is issued in six study-units as follows:

- I. Teamwork
 - II. Handling Men
 - III. Organization
 - IV. Machinery and Materials
 - V. Production Records
 - VI. Management
-

BUSINESS TRAINING CORPORATION
NEW YORK CITY

I

The Production Man in the New Era

LET me tell you the story of Jim Jordan. It illustrates the point of this chapter, and the idea back of it is a basic one in the Course in Modern Production Methods.

*Just an
Average
Fellow* In 1917 Jim was assistant foreman in a Connecticut machine shop, where he had been working several years. He was a good average fellow on the job. I suppose he was called a capable workman—he managed to keep abreast of his tasks—but he was really very much limited because of his routine attitude and lack of interest in his work.

Then came America's entrance into the Great War. It seemed to challenge Jim. It appealed to some instincts that had not been observed by his fellows before, and the first thing they knew Jim had quit and gone into the Army. He served faithfully, went through the hard fighting of 1918, and came out of it eager to get back to God's country and with a real ambition in life.

It was a changed Jim who walked down the gangplank of the *George Washington* at Hoboken, in the early part of 1919. He had known me in Bridgeport, and now came up to my office to ask if I couldn't steer him to a job, "a real job where a fellow'll have a chance to be somebody that counts." It was apparent that Jim wanted a white-collar job—he wanted to work in an office or store, or, most of all, he wanted to go on the road as a salesman. Argument only made him more determined, so I sent him to a mercantile acquaintance who found a place for Jim. The job was a clerkship in the shipping department of a wholesale house, and Jim lasted about six weeks. I ran across him next in Pittsburgh. He had gained his great desire, he was traveling salesman for a small hardware factory, but he was not happy. "The shipping job was too slow, and too fussy," he said, "checking papers and such like. And this job is too fast; I'm on the go all the time, but I don't seem to get anywhere."

"Why don't you get back into the manufacturing end, Jim," I suggested. "You know that game, and can get ahead if you tackle it in the right spirit. Get into the factory of this hardware business; or go back to the machine shop—they'll be tickled to see an old-timer back with a record like your's and a new ambition to be somebody."

*Working at
What You
Know*

"I don't know but that you're giving me the

straight dope this time,” answered Jim in his eager way. “To tell the truth, I’ve got a hankering for the feel of tools in my hand and for seeing things get done.”

Jim went back. He went back to his old job as assistant foreman in the same shop that had employed him before the war. But he did not stay in that job long. He was rapidly advanced from one position to another, until at the end of the year he was made assistant to the superintendent.

“What’s the secret of Jim Jordan’s success?” I asked the superintendent of that plant recently.

*A Man Who
Broadened
Out* “It’s Jim himself, mostly,” said the old superintendent, chuckling. “He’ll have my job some day, I reckon. It ain’t that Jim’s any smarter with tools than he was before; but he’s broader-minded. He sees that there’s

more to factory work than just tending his own machine. His brain is busy all the time picking up new facts that will help his work, broadening his knowledge of the plant, its organization, equipment, methods, and policies. He’s a live team-worker now, whereas before he was just a sort of lone plodder.

“And then of course, it’s the times we’re living in that’s partly responsible,” went on the superintendent. “No danger of a live one getting lost in the crowd these days. The demand’s too great. The need for good pro-

duction men is too all-fired insistent and persistent for anybody who's got even the makings in him to be overlooked or passed by. Yes sir, this is the day of the production man. He's the king pin in industry, and will be for the next ten or twenty years, while the world's trying to make up for what it lost in the war. It's a lucky time in the world's history for the chap that knows the production game."

And it isn't only the superintendent of the Connecticut machine shop who gives this judgment. I have heard it from the lips of hundreds of factory executives within the past few months.

*The Era of the
Production
Man*

This is the era of production. In business, in domestic trade, in foreign trade, the cry is "More goods, more goods." The world's biggest job today is to make goods more plentiful.

The years following the American Civil War witnessed a great revival in industry. In fact, the foundations of American manufacturing as it exists today were largely laid in that period of greatly stimulated production. The wastage of the World War is far greater than that of the Civil War and affects vaster areas and more numerous populations. The demand for production is proportionately greater now than it was in any previous period.

The decade from 1920 to 1930 will be ten years of supremacy for industry, when the American factories will stand in the forefront of the world's productive forces, and the men

who supervise and operate them will be the chief forces in the business of the world.

To the man who is looking for an opportunity to make good in a real way, I know

*The Modern
Need for
Trained Men*

nothing that offers a bigger opening or a surer promise of success than the production field of American industry. Of course he has to apply himself. It is not merely men that are needed, but *trained* men.

And trained men, you will find, are eager learners. They are not the kind who are most apt to boast of what they know. They realize that a fellow's education is never finished, that he can always increase his skill and enlarge his knowledge, and with more application can make himself a better man in his job. They are not like the farmer's son in Vermont who disappeared right in the middle of haying. A friend told the father that the boy had been seen in town working in a lawyer's office, but he took no notice of it. In about ten days the boy appeared one morning at breakfast and ate his meal without saying anything. He went about his chores, and the father made no comment. In the evening, however, the old gentleman asked at the supper table, "Well, Tom, how did you like the law?" Tom replied, with a twist of disgust on his face, "I didn't like it. The law ain't what it's cracked up to be. *I'm sorry I learned it.*" Figuratively, that is the amount of time and application that some men put into their prepara-

tion for production work, and then call themselves trained.

During 1916 and 1917 I was in France in charge of a munitions plant where we employed 10,000 women. Those were dark days. The men were at the front, and my factory workers consisted of professional women, actresses, grand opera singers, soldiers' wives, soldiers' daughters, soldiers' widows. But they were vitally interested in the thing they were doing—they were a part of the great force that was saving France from the invader—and the way these unskilled, untrained women turned out shells was a revelation. It was a revelation of what can be accomplished through the worker's interest in the work.

When I came home from France, the first thing they gave me to do was a job of building 300 seaplanes for the Navy. By this time Uncle Sam had commandeered most of the trained mechanics. I managed to get a few skilled men as foremen; the other jobs were filled with a varied crew—truck gardeners, lobster fishermen, toy makers, shirt-waist workers, milliners. My best man had been a butcher. But with my little squad of skilled foremen to supervise this unskilled labor, we managed to do the job thoroughly, and sent the three hundredth plane off the launching ways a month ahead of time.

*Trained
Foremen and
Untrained
Workers*

Such emergencies are a thing of the past now. But they taught us some lessons in

utilizing labor, and showed what can be done with trained squad-leaders. My policy in the seaplane factory was to get together my group of foremen, start a school of instruction, and use these foremen in training others. Hundreds of industrial plants today have awakened to the fact that by training they can transform their whole factory organization—reduce the risk of accidents, key up production, make their employees more valuable because more productive. The program of the new era in industry, as I see it, is this: To make goods plentiful, and men dear.

The kind of training that is needed to fit men for the requirements of modern industry is the training that will give men a broad view and an intelligent interest in their work. Technical instruction is not enough. Jim Jordan was well versed in the tools and machines used in his work. It was only when through the awakening of experience he was brought to see his factory as a whole, and to study it as a balanced organization of men and equipment, that he became the valuable man whom the superintendent noted with such marked interest.

*Sink-or-Swim
Training now
Inadequate* Up to a few years ago factories depended upon the traditional system of sink-or-swim training to supply their requirements. Nobody can deny that it produced good men. A man went in as raw material, starting as apprentice or water-boy or time-keeper, or in

some other lowly position, and worked up through various positions and through the series of factory departments. Such a process of course cost time, and was often wasteful both to employer and employee.

Not only is modern industry unable to wait for this slow process to turn out its dependable shop men, but present conditions make the system applicable only in limited cases. The units of production are so large and the work is so highly specialized, that it is no longer practicable for employees (in most factories) to graduate from department to department and pass through the entire organization. An employee, entering a certain department, is likely to become a specialist in the particular functions of his machine or process without acquiring much knowledge of the other departments or of the inter-relations within the factory. He may become extremely expert at his job, but he rarely gets the large view of things. His experience tends to make him a technician rather than a co-worker or a leader.

The only way to get the broader knowledge which develops latent abilities and makes good team members and shop leaders, is to *study* production—to get acquainted with industry as it has developed, as it is organized and carried on in the modern world; to understand the personal factors which enter into management, and to learn the fundamental principles

*The Kind of
Training
Needed*

of direction and control as they are applied in modern plants.

These are subjects which cannot easily be picked up in the course of ordinary factory experience. Details may be gathered here and there, a smattering of this or that may be acquired along with mastery in a particular departmental specialty. But systematized all-round knowledge of production demands systematized study of the general subject, under careful guidance, and with the training closely tied up with actual factory work.

Back in the summer of 1918 I was asked if it wouldn't be practicable to do something for the supervisors in industry in the way of training, such as was already being done on a handsome scale for many workers in government plants. I came to the conclusion that it would not be practicable, nor desirable, to do this through the government; that what we ought to do in every plant was to gather together the executives of that organization—the president, and the vice-president and the general manager and the treasurer and the purchasing agent and the chief draftsman and all the foremen and assistant foremen—to gather them into one group, one family as it were, and study the subject of human engineering; all study it and apply it to their own factory problems.

That was back in the last year of the war, and today we have several thousand foremen and other executives doing that in this country

—meeting together in factory groups once in two weeks, studying the principles which underlie successful industrial organization and operation. And it is an intensive course of training, a Plattsburg course, of only twelve weeks. It is a course in human engineering; in modern production methods, as informed by science and as tempered by humanity and the spirit of comradeship. It is the Course in Modern Production Methods, conducted by the Business Training Corporation.

*An Intensive
Course in
Production
Methods*

II

The Course in Modern Production Methods

THE Course in Modern Production Methods is a proved system of training. It is not an experiment. It has already succeeded. In hundreds of factories there are thousands of men who owe their present high rating of ability to the training of this Course.

The training is itself the result of numerous experiences in developing men in factory groups for production efficiency.

*A Proved
System
of Training*

Most men want to succeed at their work. As a rule they are not satisfied with being just "good enough," though some need to be awakened to their own possibilities and opportunities. But I have found that generally men are more than willing to follow schedules of study and apply themselves provided they know that the training is effective—that it really accomplishes results.

The training of the Course in Modern Production Methods is effective. It gives men the broad view that is so important to full co-

operation within a department and within a plant. It brings the principles of modern production to bear upon concrete factory problems. The training is in fact closely tied up with the daily work of the plant, and thus becomes immediately useful—something that can be put into practise at once.

All sound training in business includes three steps: (1) study; (2) practise, and (3) criticism. *Study* gives the underlying principles and methods. But unless this is followed up with actual *practise*, and the results are submitted to constructive *criticism*, the training cannot be thorough. How these three steps are carried out in the conduct of the Course is made plain in the following brief summary of the study-unit plan.

The text material of the Course comprises six study-units. The units are delivered to you one at a time, at fortnightly intervals. Each study-unit consists of a text-book and supplementary material. An important feature is a problem presenting some typical factory difficulty or situation calling for expert handling. Every study-unit includes one of these problems, the problem in each case calling into play the principles and methods taught in the text which it accomplishes. By solving the problem the student gets valuable practise in the handling of factory problems, and at the same time tests his knowledge of modern production methods. The third step of the train-

The Study- Unit Plan

ing is accomplished by sending the written problem solution to the offices of the Business Training Corporation, where it is carefully read, constructively criticized and commented upon and returned to you, so that you may benefit by this expert review of your work.

In addition to the individual training, there are the company group conferences—meetings

*Home Study
Plus Conference
Work*

of the members of a factory or departmental organization enrolled in the Course. These conferences are held at weekly or bi-weekly intervals, at least one conference to each study-unit. At these meetings the principles and methods set forth in the units are discussed with special reference to the requirements of your own plant. Frequently, particular problems that have recently come up within your own organization are brought up and discussed in the light of Modern Production Methods. The meetings serve a two-fold purpose: (1) they keep up the progress of the Course, and (2) they tie up the study with the daily work of the plant. The exchange of ideas is helpful and serves not only to develop a better understanding of the company's policies, but also to promote greater teamplay among the organization.

The training is thus a balanced combination of home-study and conference work. The individual training is provided through a sound plan of home study, which enables each man enrolled to utilize his spare time

profitably and assures him that his progress in the Course will be just as rapid as his own efforts and accomplishments justify. The company-group conferences, on the other hand, supply the important element of discussion, bring the impressions and reactions of many minds to a focus, and give a wholesome sense of cooperation and group spirit to the work.

The text material of the Course, as stated, is contained in a series of six study-units. Each study-unit is a distinct division of the Course, and the complete series of six gives a complete summary of the essentials of modern factory methods. One unit leads naturally into the next one, and those that follow are built upon what has gone before. Thus there is constant review of the principles and methods taught, and continual weaving and interweaving of what you know with what you are learning.

The titles of the six study-units indicate in general the subject-matter, and are as follows:

- I. Teamwork
- II. Handling Men
- III. Organization
- IV. Machinery and Materials
- V. Production Records
- VI. Management

Unit I shows that the basic principle in modern industry is the idea of teamwork. It gives a graphic picture of the slow development of this idea, from the crude organization of primitive industry to the highly specialized factory of today. How this

Teamwork

teamwork is organized under modern forms of ownership is briefly indicated, and then the unit proceeds to consider what the factory team requires of its individual members. The traits of the good production man are enumerated and explained, following which a series of tests are given by which you can measure your own ability in each of the traits. Such a self-analysis provides a definite basis for self-training. It shows where you are strong and where you are weak, where you can place the most dependence, and where you need greater development. At the same time, this unit strikes the keynote of human interest and appreciation of the personal factor in management, which continues throughout the Course.

*Handling
Men*

Unit II follows up this striking introduction of the idea of teamwork with an examination into the methods of efficient man-management, from the viewpoint especially of the factory foreman. It looks upon the foreman as the key man in modern production, and man-management as the most important problem. The various forms of appeal are discussed, the problems and difficulties likely to arise are indicated, and the whole treatment is enlivened by numerous incidents from the experience of veteran shop men.

Unit III deals with Organization, but the subject is approached and handled differently from the methods used in most treatments of industrial organization. Organization is considered first of all from the standpoint

of the purpose of the business, and the various functions which contribute to the success of this purpose are named, analyzed, and defined. The necessary requirements to good organization are made plain. The unit discusses in turn (1) how the factory team is built up, (2) how the team is held together, and (3) how the team is made and kept a harmonious working whole.

*Organiza-
tion*

The fourth unit is devoted to "Machinery and Materials." As Unit III deals particularly with the organization of the human factor in industry, Unit IV concentrates on the organization

*Machinery and
Materials*

of the equipment and material factors. It discusses selection of factory site, types of plant construction and layout, selection and care of machinery and tools, and the purchasing, storing, and handling of material. A wide range of information is covered in this unit in an exceedingly compact space.

"Production Records" is the subject of Unit V. Modern factory systems of keeping tab on equipment, purchases, stores, labor, the handling of work through the plant, and indirect expenses of production are set forth fully. Numerous illustrations are cited from the practise of well-known factories. The basic principles of cost accounting are made clear, and the prevailing methods of keeping account of production costs are indicated.

*Production
Records*

Unit VI, the final study-unit of the Course, is intended to bring to a focus the preceding

units in its discussion of the nature and method of modern management. It shows how all these factors of men, machinery, and materials are organized and controlled through the plant management. The place of system is made clear. Types of management are discussed, and illustrated by means of graphic charts. The application of the principles is illustrated in the case of a large industry, whose organization and functions are analyzed, and then discussed in detail, the lines of authority and responsibility being indicated.

*An
Authoritative
Course*

The teaching is authoritative. In the preparation of the unit material, the director has had the assistance of a number of well-known men in the industrial field. Credit especially is due John H. Van Deventer, editor of the *American Machinist*; J. William Schulze, formerly controller for Robert H. Ingersoll & Brother, later of the organizing staff of the U. S. Shipping Board; A. C. Jewett, superintendent of engineering for the Winchester Repeating Arms Company, formerly professor of mechanical engineering at the University of Maine; John A. Hartnedy, industrial engineer, formerly on the efficiency staff of the City of New York; and Fred Colvin, of the McGraw-Hill engineering publications. These are all men of wide and successful industrial experience.

From the brief outline it will be seen that the Course embraces essential factors in pro-

duction, and is so organized as to introduce these factors in the order most effective for training. At the end of the Course you have a grasp of modern production, and at the same time you have definite measurements of your own rating in the qualities necessary to complete success. Knowledge gained in this way is a continuing growth. Just as one unit is built upon what has preceded it, so experience will build upon the knowledge gained in the Course, and the production man will find himself developing into a good production man, and the good production man into a better one.

III

Following the Course

THE method of conducting the Course is an important element in its success, and the full value of the training can be had only by your complete cooperation. It is not enough that you read the texts. It is not even enough that when convenient you try your hand at solving the problems. Your cooperation means following the Course in accordance with the plan laid out, and now to be explained here. This plan is the result of wide experience in training men in factory groups in many parts of the country, and has justified itself over and over again by its results.

The six study-units are designed to be taken up one at a time. Unit I is delivered to the student at the beginning of the training, usually at the first meeting of his group, and the others are delivered at semi-monthly intervals during the three-month period of the Course.

With the text-book of each study-unit there is wrapped an envelope containing the following inclosures: an *introductory letter* from the Director, a *problem* to be solved by the student, and a *question-service card*. At the

first meeting of the group each student is provided with a pad containing specially printed paper to be used in submitting solutions to the problems. It is earnestly requested that all problem solutions sent to the Business Training Corporation be on these standard sheets.

As the Course covers a period of three months, the average time devoted to each unit is about two weeks. At the end of every second week you are supposed to have completed all your work on one unit; to have read the text thoroughly and mastered its contents; to have submitted your questions or requests on the question service card or by any other convenient form; to have solved the problem and turned it in for criticism by the staff of the Business Training Corporation; and to have attended and participated in your group-conference. By systematic application the Course can be made an intensely interesting means of employing your spare time and thereby developing your business ability in a very real and profitable way.

On receiving the first unit the temptation is to pick up the textbook and look it through.

Before yielding to this, however, open the envelope which accom-

*How to Study
Each Unit*

panies the text and look at its contents. You will find there the INTRODUCTORY LETTER from the Director of the Course—a personal message which is intended to introduce you to the new unit and which constitutes a foreword to its contents. Read this first. After you have read the letter you

will approach the text with a mind prepared for its subject-matter, and will find yourself already in tune with its spirit and purpose.

Now you are ready to read the TEXT-BOOK (without attempting at this time to study it thoroughly). Your reading of the text will prove, we believe, a real pleasure; for you will find that it not only contains ideas of direct value to you in your work, but that they are so presented that they hold your interest from the first page to the last. Usually a man will read the unit through at one sitting, and this is a good plan, for it enables you to see the subject under discussion as a whole.

After completing this first reading of the text you will probably find questions occurring to you as to the application of certain of its ideas to your own work. Here is where the QUESTION SERVICE CARD comes in. If you will write on this card whatever questions occur to you that are relevant to the teaching of the unit, and will mail the card to the Business Training Corporation, it will bring you a prompt answer from the staff in Modern Production Methods.

Next take up the PROBLEM. This also is contained in the supplementary envelope. You will find that it is a description of some factory problem—some typical situation, complication, or opportunity such as might develop in any plant. Your task here is to write out on the problem-solution sheets furnished a detailed statement of how you would handle this factory problem. The solution you write

will be carefully and constructively reviewed by the staff in Modern Production Methods and returned to you promptly.

One word of warning is in place here. Don't hash over this solution. Think the problem through. Possibly jot down points you want to make. Then write your solution just as you might a report to the president or general manager.

Keep in mind always that you can get the most value out of the Course when you go into each detail thoroughly and depend on your own efforts to get results. *Depend on Your Own Efforts* Getting suggestions from some one else as to the solution to a problem, for example, accomplishes nothing that is helpful to you and is little more than a waste of your time. On the other hand, the subscriber who follows the Course systematically and sends in his problem solution on schedule time and always depends on himself alone to do the work is *learning* Modern Production Methods and is getting the utmost value from the Course.

When solutions are received by the staff they are criticized and commented upon with a view to the needs of the individual subscriber. For that reason, the more you tell the service staff of yourself, the better they will understand your needs and the more concrete will be the results for you.

Of course you will want to make a good record in your problem work. In order that you may know just how you stand, a grade is given

to each of the solutions before it is returned to you by the service staff. Many factors must be taken into consideration before this grade is accorded. The thoroughness with which the solution is done, the care which is taken with it, the way in which the important points are emphasized, the clearness with which you tell the staff just what your ideas are about solving the problem—all of these things are important to consider before a grade is finally given to a problem solution. This does not mean that because a man doesn't write very well, or perhaps has difficulty in putting his ideas on paper, he should hesitate about sending in his solution. Nor does it mean that necessarily a lower grade will be assigned him for that reason. Even if he does not clearly understand the handling of a problem, a man should nevertheless try his hand at a solution and send in the result; for unless he does get in touch with the service staff by this means, we will be unable to help him.

The System of Grading Solutions are graded alphabetically. *A* (95 to 100%) means that the solution is of very high excellence; this grade is very rarely given. *B* (85 to 95%) represents a solution which is thoroughly handled and shows care in preparation. All subscribers should aim to get a grade of *B* in their work and to get a grade of *A* if possible. *C* (75 to 85%) represents a solution which is good, but shows some carelessness in handling or the omission of some essential part of the problem due to an oversight. *D* (60 to

75%) indicates a solution which is considered below average. *E* (below 60%) is the mark for work which is of so poor a grade as to be practically unacceptable.

A grade of *C* or above shows that the subscriber is doing good work and is accomplishing real results for himself out of the Course. When a grade below *C* is received, the subscriber should make an earnest effort to handle future problems more carefully and should ask questions and get help from the service staff to carry on the Course.

Since these problems deal with practical shop questions and with the human element in industry they cannot be graded with the same exactitude as a problem in arithmetic or algebra. But the grade enables each man to see how his work in the Course is regarded by a competent member of our staff.

Now that you have gone over the text, have tried some of its principles in solving the problem and have been stimulated to think of your own daily work in terms of its teachings, you will find redoubled interest in reviewing and, this time, *mastering* the text. The first reading was intended merely to get you acquainted with its ideas. Now you are to read more intensively, to study the book chapter by chapter. As you finish a chapter, turn to the quiz questions in the back of the book and test yourself on your mastery of the chapter. Do this with each chapter. Concentrate. Be thorough. Don't pass on to the next idea or the next chapter until you have thoroughly mastered the one in hand.

This program is to be followed for each of the six units. In addition there is one more step involved in your whole-hearted cooperation with the training. That is your faithful attendance upon the group-conferences. These meetings are of the utmost importance, not only to the company but also to you individually. The work of the Course as it applies to the detailed problems of your own plant is brought to a focus at the group conferences. The man who misses a conference, or slights it, who is inattentive or indifferent to its discussions, is losing much more than the time. He is losing the chance to bring his own ideas and opinions and ability to the attention of his associates and his company.

And then, too, you will want to go to these company conferences primed with questions.

Ask

Questions

There may be some things which you did not clearly understand in reading the texts; these you want to take to the company conference and get cleared up. There may be some particular production problem which is giving you concern; bring that up at the meetings and get the ideas of your fellow-workers on this point. Get on your feet and express your ideas and encourage others to do so. You want your group to be a real "live wire" bunch. And that means you have to do your part. If you are reticent about expressing yourself at the group meetings, write out your questions and give them to the group leader, who will see to it that they are brought up and answered.

This makes a really constructive program of study and training which, if conscientiously carried out, will mean that you will get facts and ideas and new methods that will send you into your shop with a keener interest in everything that goes on and with an ambition and definite purpose that is bound to bring results for you.

Your program in following the Course may be summarized, therefore, in the following brief outline of the steps to be pursued with each of the six study-units. They are six in number.

*Your
Schedule*

1. Read the Introductory Letter contained in the envelope.

2. Read the Text through, at one sitting if possible.

3. Use the Question Service Card to ask questions suggested in your reading.

4. Take up the Problem and write the solution that it calls for.

5. Study the Text thoroughly, chapter by chapter, testing yourself by means of the quiz questions.

6. Attend the Group Conference, and be prepared to discuss questions raised in the text or in the problem to be considered at that conference.

From this discussion, the purpose of the Course must be clear to everyone. It is *to help people in factories to do better work*. The individual worker is asked to look upon himself as a plant producing a certain commodity. That commodity is the service which

he sells his employer. The service is made up of his experience, skill, knowledge, loyalty, and other personal qualities which enter into ability and willingness to work. Just as the factory gets ahead by increasing its production, so the worker gets ahead by turning out more and a better grade of work.

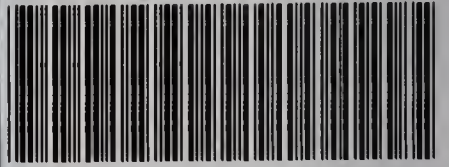
The purpose of the Course is to help men and women in factories to produce more and better work, both for their own benefit and for that of their employer. Higher individual production means higher plant production, and higher plant production means lowered costs, a more stable industry, better working conditions, larger opportunities for advancement, and a high wage scale. The worker who is careless, or slow and bungling, or ignorant, or lazy, is a drag on the whole establishment. He keeps wages down. It is to the interest of each individual to have the factory organization just as perfect a team as possible.

The Course in Modern Production Methods has helped numerous factory organizations to become smoother-working factory teams. It has made men and women more capable workers, more intelligent workers, more valuable workers. Thousands of factory foremen, shop managers—even superintendents and general managers—have followed the Course along with their subordinates in various office, shop, and yard positions, and have found the training individually helpful.

What it has accomplished for others, it will do for you.

Copyright, 1920, by
Business Training Corporation
(*Printed in the United States of America*)
All Rights Reserved

LIBRARY OF CONGRESS



0 021 589 619 5

